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DECL RATION AND POWER OF AT ORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. READPOO7

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

(check one)	1. 🔀	is attached hereto		
	2.	was filed on		as
		U.S. Application	Serial No.	
			l on	
	3.	was filed on		as
		International PCI	Application Serial No.	
		and was amended	on	
I hereby state that I by any amendment			e contents of the above-identified	specification, including the claims, as amended
I acknowledge the o	duty to disclo	se information whic	h is material to the examination	of this application in accordance with Title 37,
hereby claim forei	ign priority be	enefits under Title 3.	5, United States code, § 119(a)-(d) or § 365(b) of any foreign application(s) for
patent or inventor's United States, listed or PCT Internationa	certificate, or below and ha l application h	§ 365(a) of any PC we identified below,	T International application which	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed?
patent or inventor's United States, listed or PCT Internationa Prior Foreign App	certificate, or below and ha l application h	§ 365(a) of any PC we identified below, naving a filing date b	T International application which, by checking the box, any foreign pefore that of the application on w	
patent or inventor's United States, listed or PCT Internationa Prior Foreign App	certificate, or below and ha l application h	§ 365(a) of any PC we identified below,	T International application which by checking the box, any foreign	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No
patent or inventor's United States, listed or PCT Internationa Prior Foreign Appl. Appl. No.)	certificate, or below and ha l application h	§ 365(a) of any PC we identified below, naving a filing date b	T International application which, by checking the box, any foreign perfore that of the application on ward (Filing Date)	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed?
patent or inventor's United States, listed or PCT Internationa Prior Foreign Appl. (Appl. No.)	certificate, or below and ha l application h	§ 365(a) of any PC we identified below, naving a filing date b	T International application which, by checking the box, any foreign pefore that of the application on w	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No
patent or inventor's United States, listed or PCT Internationa Prior Foreign Appl. (Appl. No.)	certificate, or below and ha l application h	§ 365(a) of any PC we identified below, naving a filing date b	T International application which, by checking the box, any foreign perfore that of the application on ward (Filing Date)	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No
patent or inventor's United States, listed or PCT International Prior Foreign Apple (Appl. No.)	certificate, or below and ha l application h	§ 365(a) of any PC we identified below, naving a filing date b	T International application which, by checking the box, any foreign perfore that of the application on ward (Filing Date)	h designated at least one country other than the n application for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No Yes No
patent or inventor's United States, listed or PCT Internationa Prior Foreign Appl (Appl. No.) (Appl. No.)	certificate, or below and ha l application has lication(s)	§ 365(a) of any PC ve identified below, naving a filing date b (Country) (Country)	T International application which by checking the box, any foreign perfore that of the application on which the control of the	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No Yes No
patent or inventor's United States, listed or PCT Internationa Prior Foreign Appl (Appl. No.) (Appl. No.)	certificate, or below and ha l application has lication(s)	§ 365(a) of any PC ve identified below, naving a filing date b (Country) (Country)	T International application which by checking the box, any foreign pefore that of the application on which the control of the	h designated at least one country other than the napplication for patent or inventor's certificate, which priority is claimed: Priority Benefits Claimed? Yes No Yes No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Filing Date)

Attny Docket No. READP007

(Application Serial No.)

Prior U.S. Application(s)			
(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)	
(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)	
No. 32,043); Albert S. Penil Raymis H. Kim (Reg. No. 39	lla (Reg. No. 39,487); Brian R. C	ing Paul L. Hickman (Reg. No. 28,516); Peter B. Martin pleman (Reg. No. 39,145); Dawn L. Palmer (Reg. No. 4 my principal attorneys to prosecute this application and to th:	1,238);
Send Correspondence To:	Dawn L. Palmer HICKMAN & M P.O. BOX 52037		
	Palo Alto, Califor	-nia 94303-0746	
Direct Telephone Calls To:	Dawn L. Palmer at t	elephone number (650) 470-7430	
are believed to be true; and furmade are punishable by fine of false statements may jeopardiz	orther that these statements were ma	edge are true and that all statements made on information and the with the knowledge that willful false statements and the on 1001 of Title 18 of the United States Code, and that such by patent issuing thereon.	like so
Typewritten Full Name of Sole or First Inventor:	Chih-Huang Lai	Citizenship: TAIWAN	
Inventor's signature:	Ship- Honory	Date of Signature: 11/13/98	
Residence: (City)	Hsinchu	(State/Country)Taiwan	
Post Office Address:	Department of Materials Science	e and Engineering, National Tsing Hua University.	
·	101, Sec. 2, Kuang Fu Road, H	sinchu, 30043, Taiwan	
Full Name of Second Joint			
Inventor (if any):	Zhupei Shi	Citizenship: CHINA	
Inventor's signature:	Thiple Shi	Date of Signature: 11/13/98	
Residence: (City)	San Jose	(State/Country)California/USA	
Post Office Address:	3245 Chateau Du Lac, San Jose	California 95138	
Full Name of Third Joint Inventor (if any):	Hua-Ching Tong	Citizenship: USA	
Inventor's signature:	The-ling by	Date of Signature: US	
Residence: (City)	San Jose	(State/Country)California/USA	

Attny Docket No. READP007

Post Office Address:

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

Full Name of Fourth Joint Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino, Fremont, Californ	ia 94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	Califomia/USA
Post Office Address:	6592 Woodeliff Court, San Jose, Califor	·	

DEC ARATION AND POWER OF A CORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. READPOOT

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

(check one)	1. 🔀	is attached hereto.				
	2. 🔲	was filed on	l No		_ as ~.	
	3.	was filed on International PCT App and was amended on _	lication Serial No		_ as 	
I hereby state that I by any amendment	have reviewed referred to above	and understand the cont	ents of the above-iden	ntified specification	on, including the claims, as a	ımended
I acknowledge the CFR § 1.56.	duty to disclose	e information which is n	naterial to the examin	ation of this appl	lication in accordance with	Γitle 37,
patent or inventor's United States, listed	certificate, or below and hav	365(a) of any PCT Int	ernational application necking the box, any t	which designated foreign application	(b) of any foreign application of at least one country other in for patent or inventor's certy is claimed:	than the
Prior Foreign App	lication(s)				Priority Benefits Claimed?	
Appl. No.)		(Country)	(Filing Date)	 -	· · · · · · · · · · · · · · · · · · ·	
Appl. No.)	·	(Country)	(Filing Date)	·	Yes No	
Appl. No.)		(Country)	(Filing Date)		Yes No	
hereby claim the be	enefit under 35	U.S.C. §119(e) of any U	nited States provision	ual application(s)	listed below:	`
Application Serial N	No.)	(Filing Date)	· 			
Application Serial N	Io.)	(Filing Date)	_ ,			

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Attny Docket No. READP007

	n Serial No.)	(Filing Date)	(Status - patented, pending	, abandoned)
(Application Serial No.)		(Filing Date)	(Status - patented, pending,	, abandoned)
Raymis H. I	Kim (Reg. No. 3	w firm of Hickman & Martine, inchilla (Reg. No. 39,487); Brian R. 39,462); and Jerray Wei (43,247); Trademark Office connected therev	Coleman (Reg. No. 39,145); Day	No. 7 Dolman (D N
Send Corres	pondence To:	P.O. BOX 52037	MARTINE, LLP	
Direct Telepl	hone Calls To:	Dawn L. Palmer at	telephone number (650) 470-743	0
made are puni	ishable by fine of the same of	ments made herein of my own know urther that these statements were mor imprisonment, or both, under sect ze the validity of the application or a Chih-Huang Lai	ade with the knowledge that willfi	11 folgo statamanta 3 45 - 111.
		<u> </u>	Citzensimp	TAIWAN
nventor's sig	mature.		D 4: 401 .	
nventor's sig			Date of Signature:_	
Residence:	(City)	Hsinchu	(State/Country)	Taiwan
_	(City)			Taiwan
Residence:	(City)		(State/Country)	Taiwan
Residence:	(City)	Department of Materials Scien	(State/Country)	Taiwan g Hua University.
Residence: Post Office Ad	(City)	Department of Materials Scien 101, Sec. 2, Kuang Fu Road, H Zhupej Shi	(State/Country) ce and Engineering, National Tsing Isinchu, 30043, Tajwan Citizenship:	Taiwan g Hua University. CHINA
Residence: ost Office Ad ull Name of S aventor (if any	(City)	Department of Materials Scien	(State/Country) ce and Engineering, National Tsing Isinchu, 30043, Tajwan Citizenship: Date of Signature:	Taiwan g Hua University. CHINA
Residence: ost Office Ad ull Name of S oventor (if any oventor's sign	(City)	Department of Materials Scien 101, Sec. 2, Kuang Fu Road, H Zhupej Shi	(State/Country) ce and Engineering, National Tsing Isinchu, 30043, Taiwan Citizenship: Date of Signature: (State/Country)	Taiwan g Hua University. CHINA
Cesidence: Cost Office Ad cull Name of Soventor (if any nventor's sign esidence:	(City) ldress: lecond Joint (City) lature: (City) lress:	Department of Materials Scien 101, Sec. 2, Kuang Fu Road, H Zhupej Shi San Jose	(State/Country)	Taiwan g Hua University. CHINA
Cesidence: Cost Office Adull Name of Soventor (if any esidence: cost Office Add	(City) deress: decond Joint y): nature: (City) dress: hird Joint):	Department of Materials Scien 101, Sec. 2, Kuang Fu Road, H Zhupei Shi San Jose 3245 Chateau Du Lac, San Jose	(State/Country)	Taiwan g Hua University. CHINA California/USA

Attny Docket No. READP007

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

T MIT LANGE OF LORS ME ADMI	L Company of the Comp		
Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:	Ant S Fortmayer	Date of Signature:_	11/17/98
Residence: (City)	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino, Fremont, California	94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	6592 Woodcliff Court, San Jose, Californ	ia 95120	·

DECY \RATION AND POWER OF ACTORNEY FOR URIGINAL U.S. PATENT APPLACATION

Attorney's Docket No. READPOOT

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

	1. 🔀	is attached hereto.		
	2. 🗌	was filed on	·	as
	_		ial No	
÷,		and was amended on		•
	3. 🗍	was filed on		as
		***	oplication Serial No.	
I hereby state that I hat by any amendment ref			ntents of the above-identified	specification, including the claims, as amended
	y to disclose	information which is	material to the examination	of this application in accordance with Title 37,
				d) or § 365(b) of any foreign application(s) for
hereby claim foreign patent or inventor's ce Jnited States, listed be or PCT International a	rtificate, or itself or it	§ 365(a) of any PCT In e identified below, by	aternational application which	n designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed: Priority Benefits Claimed?
hereby claim foreign patent or inventor's ce Juited States, listed be	rtificate, or itself or it	§ 365(a) of any PCT In e identified below, by	nternational application which checking the box, any foreign	n designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed:
hereby claim foreign patent or inventor's ce Jnited States, listed be or PCT International application Foreign Application	rtificate, or itself or it	§ 365(a) of any PCT Is the identified below, by twing a filing date before	nternational application which checking the box, any foreign re that of the application on w	designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed: Priority Benefits Claimed? Yes No
hereby claim foreign patent or inventor's ce Jnited States, listed be or PCT International as Prior Foreign Applica Appl. No.)	rtificate, or its low and have polication had action(s)	§ 365(a) of any PCT Is the identified below, by twing a filing date before (Country)	nternational application which checking the box, any foreign re that of the application on water (Filing Date)	n designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed: Priority Benefits Claimed?
hereby claim foreign patent or inventor's ce Jnited States, listed be or PCT International as Prior Foreign Applica Appl. No.)	rtificate, or its low and have polication had action(s)	§ 365(a) of any PCT Is the identified below, by twing a filing date before	nternational application which checking the box, any foreign re that of the application on w	designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed: Priority Benefits Claimed? Yes No
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hereby claim foreign patent or inventor's ce Jnited States, listed be or PCT International a Prior Foreign Applica Appl. No.) Appl. No.)	mificate, or elow and have pplication had ation(s)	§ 365(a) of any PCT Is the identified below, by twing a filing date before (Country) (Country)	reternational application which checking the box, any foreign re that of the application on war (Filing Date) (Filing Date)	designated at least one country other than the application for patent or inventor's certificate, thich priority is claimed: Priority Benefits Claimed? Yes No Yes No

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(Filing Date)

Attny Docket No. READP007

(Application Serial No.)

Prior U.S. Application(s)		:	
(Application Serial No.)	(Filing Date)	(Status - patented, pending, a	bandoned)
(Application Serial No.)	(Filing Date)	(Status - patented, pending, s	bandoned)
No. 32,043); Albert S. Penill Raymls H. Kim (Reg. No. 39	firm of Hickman & Martine, includ la (Reg. No. 39,487); Brian R. Co ,462); and Jerray Wei (43,247) as Trademark Office connected therewi	my principal attorneys to prosecu	I D' Lames (vef- 110, 471250)!
Send Correspondence To:	Dawn L. Palmer HICKMAN & M P.O. BOX 52037 Palo Alto, Califor		
Direct Telephone Calls To:	Dawn L. Palmer at t	elephone number (650) 470-7430	
are believed to be true; and fur	ents made herein of my own knowler ther that these statements were ma- imprisonment, or both, under section the validity of the application or an	de with the knowledge that willfu on 1001 of Title 18 of the United S	l faise statements and the like so
Typewritten Full Name of Sole or First Inventor:	Chih-Hyang Lai	Citizenship:	TAIWAN
Inventor's signature:		Date of Signature:_	
Residence: (City)	Hsinchu	(State/Country)	Taiwan
Post Office Address:	Department of Materials Science	e and Engineering, National Tsing	Hua University.
	101, Sec. 2. Kuang Fu Road, H	sinchu, 30043, Taiwan	
Full Name of Second Joint Inventor (if any):	Zhupej Şhi	Citizenship:	CHINA
Inventor's signature:		Date of Signature:_	
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	3245 Chateau Du Lac, San Jose	California 95138	
Full Name of Third Joint Inventor (if any):	Hua-Ching Tong	Citizenship:	UŞA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	California/USA

Atmy Docket No. READP007

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:		Date of Signature:_	
Residence: (City) _	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino Fremont California	94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:	(hunder Willes)	Date of Signature:	11/23/98
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	6592 Woodcliff Court, San Jose, California	a 95120	·